

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all previous claims in the application.

Listing of Claims:

1. (Currently Amended) A method of detecting or differentiating rheumatoid arthritis, comprising:

measuring the level wherein the levels of human lipocalin-type prostaglandin D synthase (L-PGDS) in a sample collected from a subject is measured free of renal disease and/or ischemic heart disease; and

detecting or differentiating rheumatoid arthritis if the level of L-PGDS is higher in the sample collected from the subject free of renal disease and/or ischemic heart disease than it is in a healthy volunteer and/or in a patient with a joint disease other than rheumatoid arthritis.

2. (Currently Amended) The method of detecting or differentiating rheumatoid arthritis according to claim 1, wherein

the levels of human L-PGDS in a sample collected from a subject is measured, and the measured level of human L-PGDS measurement value is compared with a predetermined cut-off value that has been predetermined based on measurements values of human L-PGDS in samples collected from healthy volunteers and/or patients with joint diseases other than rheumatoid arthritis.

3. (Currently Amended) A method of determining the stage of disease with regard to rheumatoid arthritis, comprising:

measuring the level wherein the levels of human L-PGDS in a sample collected from a subject free of renal disease and/or ischemic heart disease; is measured and determining the stage of disease with regard to rheumatoid arthritis, wherein L-PGDS concentration increases with advancement of the stage of disease is estimated based on the measurement value.

4. (Currently Amended) The method of determining the stage of disease with regard to rheumatoid arthritis according to claim 3, wherein

the levels of human L-PGDS in a sample collected from a subject is measured and the measurement value measured level of human L-PGDS is compared with a predetermined cut-off value that has been predetermined based on classification of measurements values of human L-PGDS in samples collected from rheumatoid arthritis patients classified in accordance with the stage of disease.

5. (Currently Amended) A method of determining the degree of dysfunction or severity with regard to rheumatoid arthritis, comprising:

measuring the level wherein the levels of human L-PGDS in a sample collected from a subject free of renal disease and/or ischemic heart disease; is measured and determining the degree of dysfunction or [[()]] severity[[()]] with regard to rheumatoid arthritis, wherein L-PGDS concentration increases with advancement of the degree of dysfunction or severity is estimated based on the measurement value.

6. (Currently Amended) The method of determining the degree of dysfunction or severity with regard to rheumatoid arthritis according to claim 5, wherein the measured level levels of human L-PGDS in a sample is measured and the measurement value is compared with [[the]] a predetermined cut-off value that has been predetermined based on classification of measurements values of human L-PGDS in samples collected from rheumatoid arthritis patients classified in accordance with the degree of dysfunction or [[()]]severity[D]].

7. (Currently Amended) The method according to claim 1, wherein the levels level of human L-PGDS in a sample is measured by immunoassay.

8. (Previously Presented) The method according to claim 1, wherein the sample is a body fluid.

9. (Previously Presented) The method according to claim 1, wherein the sample is a joint fluid.

10. (Previously Presented) The method according to claim 1, wherein the sample is urine or blood.

11. – 14. (Canceled)

15. (New) The method according to claim 2, wherein the cut-off value is the upper limit of a reference interval obtained by the following equation: mean value $\pm \sigma \times$ standard deviation ($\sigma = 0.5, 1, 2, 3, \text{ or } 5$).

16. (New) The method according to claim 4, wherein the cut-off value is the upper limit of a reference interval obtained by the following equation: mean value $\pm \sigma \times$ standard deviation ($\sigma = 0.5, 1, 2, 3, \text{ or } 5$).

17. (New) The method according to claim 6, wherein the cut-off value is the upper limit of a reference interval obtained by the following equation: mean value $\pm \sigma \times$ standard deviation ($\sigma = 0.5, 1, 2, 3, \text{ or } 5$).